IN THE CLAIMS

Please enter the following claims (Claims 1-12)

1. (currently amended) A micro-electromechanical switch comprising:

at least one ~~contact~~ electrode; and

a deflecting beam, said deflecting beam being attracted by said at least one electrode in the presence of an actuation voltage, said deflecting beam contacting said at least one ~~contact~~ electrode by way of a compressible deformable means affixed to at least one end of said deflecting beam or to at least one of said ~~contact~~ electrodes,

wherein said compressible deformable means ~~introduces~~ initiates a non-linear increase to a separating force able to overcome stiction when said compressible deformable means is being compressed as the micro-electromechanical switch nears its closed position, and

wherein the increase in said separating force is proportional to the increasing closing force provided by said actuation voltage as the deflecting beam nears said at least one electrode.

2. (currently amended) The micro-electromechanical switch as recited in claim 1, wherein said compressible deformable means is selected from the group consisting of a layer and discrete spring-like elements protruding from said at least one ~~contact~~ electrode.

3. (currently amended) The micro-electromechanical switch as recited in claim 1 ~~further comprising a actuating electrode coplanar to said at least one contact electrode~~ wherein said at least one electrode is an actuation electrode or a contact electrode.

4. (currently amended) The micro-electromechanical switch as recited in claim 3, wherein the deflection of said deflecting beam is governed by applying a voltage between said deflecting beam and said ~~control~~ actuation electrode.

5. (currently amended) The micro-electromechanical switch as recited in claim 4, wherein the voltage required to deflect said deflectable beam to close the micro-electromechanical switch is dependent on k0, the spring constant of said deflectable beam; ~~of~~ on the distance between said deflectable beam and said ~~control~~ actuation electrode; and on the distance between said deflectable beam and said electrode

6. (currently amended) The micro-electromechanical switch as recited in claim 1, wherein said compressible deformable means ~~introduces initiates a non-linear increase to a separating force able to overcome stiction when said compressible deformable means is being compressed as the micro-electromechanical switch nears its closed position~~ enables a sequential activation of spring constants k0, k1, k2, ..., kn, wherein n is an integer greater than or equal to 1, as the micro-electro mechanical switch closes, allowing said switch to overcome stiction.

7. (currently amended) The micro-electromechanical switch as recited in claim 1, wherein said compressible deformable means is a layer affixed to said at least one ~~contact~~ electrode, said layer being made of a material selected from the group consisting of polymer matrix Parylene and anisotropic electrically conductive film (ACF).

8. (currently amended) The micro-electromechanical switch as recited in claim 1 [6] wherein said separating force able to overcome stiction ~~further~~ depends on spring constants k1, ... kn, said separating force being sequentially added to the force dependent on k0, the spring constant of said deflectable beam, and wherein said separating force depending on spring constants k1, ... kn, is only activated by the compression of said compressible deformable means ~~deflecting beam against said at least one contact electrode~~.

9. (currently amended) A micro-electromechanical switch comprising:

at least one contact electrode;

~~a control~~ an actuation electrode coplanar to said at least one contact electrode; and

a deflecting beam, said deflecting beam contacting said contact electrode, wherein a compressible elastically deformable means is affixed to a surface of either said deflecting beam or said at least one contact electrode~~.~~,

wherein said compressible deformable means initiates a non-linear increase to a separating force able to overcome stiction when said compressible deformable means is being compressed as the micro-electromechanical switch nears its closed position, and

wherein the increase in said separating force is proportional to the increasing closing force provided by said actuation voltage as the deflecting beam nears said actuation electrode.

10. (currently amended) The micro-electromechanical switch as recited in claim 9, wherein said deflecting beam is deflected by a voltage applied between said ~~control~~ actuation electrode and said deflecting beam.

11. (currently amended) The micro-electromechanical switch as recited in claim 9, wherein said compressible elastically deformable means are discrete spring-like elements protruding from said at least one contact electrode or said deflecting beam.

12. (currently amended) A micro-electromechanical switch comprising :

at least one ~~contact~~ electrode;

~~at least one switching electrode ,~~

a deflectable conductive beam anchored at one end thereof and positioned ~~across~~ within a cavity surrounding said deflectable beam, wherein at least one ~~switching~~ electrode is coated with at least one compressible, conductive layer that is in electrical contact with said at least one ~~switching~~ electrode and which is separated from said deflectable conductive beam by said cavity when the micro-electromechanical switch is in an "off" state,

wherein said compressible deformable means initiates a non-linear increase to a separating force able to overcome stiction when said compressible deformable means is being compressed as the micro-electromechanical switch nears its closed position, and

wherein the increase in said separating force is proportional to the increasing closing force provided by said actuation voltage as the deflecting beam nears said actuation electrode.

13. (currently amended) The micro-electromechanical switch as recited in claim 12, wherein said deflectable conductive beam is deflected by a force toward said at least one actuating ~~control~~ electrode ~~and said at least one switching electrode~~, said force being dependent on a spring constant k0 ~~is~~ generated by a voltage applied between said deflectable conductive beam and said at least one actuating ~~control~~ electrode, making contact with said compressible, conductive layer.

14. (original) The micro-electromechanical switch as recited in claim 13 , wherein said deflectable beam closes the micro-electromechanical switch and compresses said compressible, conductive layer with a force dependent on an added spring constant k1, said compression of said compressible, conductive layer adding to a restorative force that restores the micro-electromechanical switch to an open position when said voltage is removed.

15. (original) The micro-electromechanical switch as recited in claim 14 , wherein said compressible, conductive layer is positioned on a surface of said at least one switching electrode, said compressible, conductive layer comprising multiple stacked layers, with at least one of said multiple stacked layers having a different spring constant.